

October 23, 1972

Mr. Newton Steward  
California State Department of Education  
72 N. Capitol Mall  
Sacramento, California 95814

Gentlemen:

We respectfully request the opportunity to appear before you on November 9, 1972 in order to plead that Creation Theory be excluded from science textbooks used in this State. We also request that the following statement be read into the record.

We appeal to you out of a profound concern. We believe that an extreme disservice will be rendered to the education of our youth and to society if California were to require that textbooks in biology include concepts of the origin of man which are at odds with evolutionary principles.

In 1900, one might conceivably have argued that evolutionary theory was one of several alternatives. But this is no longer a remote possibility. In 1972, we have an extensive knowledge of the chemical and physical basis of heredity. This allows us to understand and to identify with molecular precision the basic mechanisms of evolution. Today, the arguments against the evolutionary principles must be placed on the same plane as those advanced by the Flat Earth Society. Who would now insist that we teach the flat earth theory in our schools? To insist that a biblical viewpoint of creation or concepts of spontaneous creation be taught as viable alternatives to the evolutionary origin of man goes beyond the bounds of all rational analysis.

To present creation as an alternative to evolution would require intellectual dishonesty in our students and teachers. It would also create real difficulties in preparing our youth to contribute to the solution of many problems in medical science we now face or shall soon face. This is because our understanding of the evolutionary mechanisms and our ability to define and solve problems of genetic diseases depend upon the same basic knowledge.

Knowledge of the molecular mechanisms of heredity is essential for the diagnosis, treatment and prevention of a variety of illnesses. It is also basic to a scientific agriculture. We are only now beginning to appreciate how much human sickness results from hereditary disorders--disorders which may change the structure of the hemoglobin molecules in our blood cells and thereby reduce the capacity of the blood to transport oxygen to the tissues--as in sickle cell anemia--or which may

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change molecules in our brains so that we become mentally deficient. Our ability to understand these disorders and to alleviate the suffering they cause is dependent upon the same basic knowledge of hereditary mechanisms which underlies our understanding of evolution. This same knowledge is being used in our efforts to understand and combat cancer. It is also vital to the development of more productive and nutritious domestic plants and animals, and to the control of destructive pests by safer means than pesticides. Indeed, there are few problems, medical or ecological, whose solution does not require or will not benefit from a knowledge of the mechanisms of heredity which are common to all life forms.

Clearly we all wish our youth to understand these basic principles so that they may participate and cooperate in the solutions to such problems. But just as clearly, we cannot expect to arbitrarily divide the teaching of these principles in the classroom--on Mondays demonstrating how they lead to an understanding of certain human illnesses, while on Tuesdays denying their validity in respect to our origins.

To insist that the textbooks used by our teachers and students contain non-evolutionary concepts of our origins is to create exactly this disastrous dichotomy. But even worse, such an insistence would result in the selection of the poorest of available texts. Authors with the greatest capability for clear explanation of the basic mechanisms of heredity are precisely those who would refuse to include the non-evolutionary concepts. In this age when biological knowledge is becoming ever more important to the decisions we make, both as individuals and as a society, we cannot afford to lower the quality of the education we provide.

We came to settle in California in 1959. We have educated our children in its schools. We take great pride in the quality of the education our State provides. We implore you not to make us the laughing stock of the entire civilized world.

Arthur Kornberg  
Professor of Biochemistry  
Nobel Laureate (Medicine, 1959)

David S. Hogness  
Professor of Biochemistry